

Title (en)

APPARATUS AND METHOD FOR DETECTING THE CURRENT DAMAGED STATE OF A MACHINE

Title (de)

VORRICHTUNG SOWIE VERFAHREN ZUM ERFASSEN DES AKTUELLEN SCHÄDIGUNGSZUSTANDES EINER MASCHINE

Title (fr)

DISPOSITIF ET PROCÉDÉ PERMETTANT DE DÉTECTER L'ÉTAT D'ENDOMMAGEMENT INSTANTANÉ D'UNE MACHINE

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Application

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Abstract (en)

[origin: WO2015090698A1] A method and apparatus for detecting the current damaged state of a machine. The invention relates to an apparatus for detecting the current damaged state of a machine according to the preamble of claim 1, wherein the data capture and editing device: •comprises a Fast Fourier analysis apparatus, for performing a transformation from pressure signals that are available in the time domain to a frequency domain as discrete-time frequency spectra (2), •additionally comprises a spatial aggregation unit and a temporal aggregation unit that combines the discrete-time frequency spectra, •additionally comprises a cepstrum analysis unit, for producing a cepstrum with various actual cepstrum values from the temporally and spatially aggregated discrete frequency spectra (5), •additionally comprises a computation unit that takes the cepstra produced in this manner and produces, at a previously defined interval of time, a plurality of actual cepstrum intervals comprising adjacent actual cepstrum values, as a result of which an actual cepstrum value, which can be ascertained from at least three adjacent actual cepstrum intervals, can be produced (6), • comprises a unit that computes (7) a target/actual comparison with the actual cepstrum value produced in this manner and a previously determined target cepstrum value.

IPC 8 full level

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